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PAUL W. MARTIN LAW DEPARTMENT, WHQ-4 1700 S. PATTERSON BLVD. DAYTON, OH 45479-0001				STEVENS, THOMAS H	
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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/653,196 Filing Date: August 31, 2000 Appellant(s): CASH ET AL.

James D. Wood, Reg. No.43,285 For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed October 25, 2004.

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# (1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

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# (2) Related Appeals and Interferences

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

# (3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

# (3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

# (4) Status of Amendments After Final

The Appellant's statement of the status of amendments after final rejection contained in the brief is correct.

# (5) Summary of Invention

The summary of invention contained in the brief is correct.

# (6) Issues

The Appellant's statement of the issues in the brief is correct.

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# (7) Grouping of Claims

Appellant's brief includes a statement that claims 1,3-18 and 20-31 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

# (8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

# (9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal:

- "Simulation Success Stories: Business Process Reengineering" Madigan et al.
   1997
- "Land and Front-End Effectiveness Model" Human Factors Engineering 1999
   All citations to prior art references appearing in this Examiner's answer refer to the paper authored by Madigan et al. and Human Factors Engineering.

# (10) Grounds of Rejection

The following grounds of rejection are applicable to the appealed claims.

The examiner maintains rejections as stated in the prosecution dated June 4, 2004.

#### **Objections**

12. The amendment filed on April 4, 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material, which is not supported by the original disclosure, is as follows (the enclosed

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alpha/numeric number represents sections of information from applicants' amendments to the original specification):

- (pg.3, line 2) "Run Simulation" is now "Rub Simulation".
- (pg. 4, lines 2-4) "There are only three parameters in this category for each model" now reads "The remaining category is the Model Parameters category.
   There are only three parameters in this category for each model.
- (pg. 6, lines 1-2) "The Run Simulation button will start running the model and scenario selected in the Models and Scenarios tables of this form". The sentence now states, "The Run Simulation button <u>1580</u> will start running the model and scenario selected in the Models <u>1510</u> and Scenarios <u>1530</u> tables of this form"
- (pg. 6, line 8) No mention of figures 27-32 in the amended specification. Also, the notation of feature of "model FEM1" was added.
- (pg. 7, line 3) The addition of the "five rectangles at the top of Figure 30..." was
   not mentioned in the original specification.

#### Rejections

# Claim Rejections - 35 USC § 103

- 13. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.

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- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 15. Claims 1,3-18,20-32 are rejected under 35 U.S.C. 103 (a) as unpatentable by Madigan-E et al. ("Simulation Success Stories: Business Process Reengineering" (1997)), in view of Human Factors Engineering ("Land and Front-End Effectiveness Model" (1999)).

Madigan-E et al. teaches business methods of how simulation aids in improving process (abstract); in particular the realm of retail; but doesn't teach how to pursue via a window-based software application that is scenario specific.

Human Factors Engineering teaches a retail-based scenario-driven software simulation model encompassing the daily activities of retail consumers with a flexible data drive model that evaluates the performance of the front-end operations at a retail store (figure 20, lines 1-2).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use Human Factors Engineering (HFE) to modify Madigan-E et

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al. since it would advantageous to implement a simulation in order to eradicate correctable retail anomalies (Madigan teaches a anomaly of customer wait time and how a scenario should be modeled to address retail anomalies such as labor issues: pg. 1277 section 3.3 paragraph).

Claim 1. A method of quantitatively evaluating alternatives to check-out operations (Madigan: pg. 1276, section 3.1, 1<sup>st</sup> paragraph) using simulation model (Madigan: pg. 1276, section 3.1, 1<sup>st</sup> paragraph), comprising: selecting from a data input dictionary parameters describing a first check-out operations; inputting parameter values for the selected parameters describing the first checkout operations into the simulation model; model transforming the first check-out operation parameters into check-out performance results; and outputting the results from the simulation model (HFE: figure 4; and Madigan: pg. 1277, left column, 1<sup>st</sup> paragraph, lines 3-4).

Claim 3. The method of claim 1 (HFE: figure 4; and Madigan: pg. 1277, left column, 1<sup>st</sup> paragraph, lines 3-4), wherein the first checkout operations includes one of a transaction process at two front facing check stands, a transaction process at two back-to-back check stands and a transaction process at two front facing check stands for fast-track customers (HFE: figure 8, (865) and (850)), parameter and description columns, respectively).

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Claim 4. The method of claim 1, (HFE: figure 4; and Madigan: pg. 1277, left column, 1<sup>st</sup> paragraph, lines 3-4) wherein the first check-out operations include check stand designs, transaction procedures and lane configurations.

Claim 5. The method of claim 1, (HFE: figure 4; and Madigan: pg. 1277, left column, 1<sup>st</sup> paragraph, lines 3-4) wherein the transforming steps is performed in either an unlimited arrival mode or a limited arrival mode (HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14).

Claim 6. The method of claim 1, (HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14) wherein the simulation model simulates two lane models using check-out operations parameters describing the following events: pre-itemization, itemization, finalization, bagging and intervention (Madigan: pg. 1277, left column, section 3.1 Model Validation).

Claim 7. The method of claim 1, (HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14) wherein the first checkout operations represents front-end operations of a check-out process (HFE: figure 14, parameter column, row 3).

Claim 8. The method of claim 7, (HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14)wherein the front-end operations has labor including cashiers,

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baggers, super-helpers (Madigan: figure 12 and HFE: pg. 1276, section 3.1, lines 1-13) and overflow resources.

Claim 9. The method of claim 1, (HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14) wherein the first check-out operations parameters a configuration category, a customer demand category, a schedule category, a transaction category, a transaction finalization category, a transaction bagging category, a transaction intervention category, and a model parameters category (Madigan: figure 8, Parameter Categories Section (820)).

Claim 10. The method of claim 9 (HFE: figure 10. Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14; and figure 8, Parameter Categories Section (820)), wherein the configuration category includes parameters defining the length of and resources in a scenario (Madigan: figure 9, description column, and first row).

Claim 11. The method of claim 10 (HFE: figure 10. Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14; and figure 8, Parameter Categories Section (820)), wherein the resources include a number and type of check-stands and belt size (HFE: figure 6, Scenario Description (630)).

Claim 12. The method of claim 9(HFE: figure 10. Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14; and figure 8, Parameter Categories Section (820)), wherein the

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customer demand category (HFE: figure 8, Customer Demand (832)) has parameters that control the workload on a front-end or lane

Claim 13. The method of claim 12 (HFE: figure 10. Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14; and figure 8, Parameter Categories Section (820)), wherein the parameters that control the workload include a number of customer arrivals and customer basket (figure 10 and 11, titles).

Claim 14. The method of claim 9 (HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14. Madigan: figure 8, Parameter Categories Section (820)), wherein the schedules category includes schedules for cashier, bagger and super-helper in 30-minute intervals during a scenario (HFE: figure 12, titles).

Claim 15. The method of claim 9 (HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14. Madigan: figure 8, Parameter Categories Section (820)), wherein the transaction itemization parameters (HFE: figure 8, Parameter Categories (822)) are scalar values.

Claim 16. The method of claim 15(HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14. Madigan: figure 8, Parameter Categories Section (820)), wherein the scalar parameters are a mean and a standard event time distribution of an event time distribution (Madigan: pg. 1277, section 3.2).

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Claim 17. The method of claim 9 (HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14. Madigan: figure 8, Parameter Categories Section (820)), wherein the transaction-bagging category (HFE: figure 8, Parameter Categories (826)) includes parameters, which govern how long it takes to bag items, and which resources are available for bagging.

Claim 18. The method of claim 9 (HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14. Madigan: figure 8, Parameter Categories Section (820)), wherein the model parameters include a number of replications, a stream number identifier and check input option identifier (HFE: figure 8, Scenario name).

Claim 20. The method of claim 1(HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14), wherein the data input dictionary comprises at least one allowable range of parameter values, and wherein the inputting step comprises inputting a parameter value within the allowed range (HFE: figure 8, range column).

Claim 21. The method of claim 1 (HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14), comprising one of outputting a report and displaying an animation of the results of the simulation (HFE: figure 18, Title: "Number of Open Lanes").

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Claim 22. The method of claim 1(HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14), further comprising: repeating selecting from a data input diction parameters describing a second check-out operations; inputting parameter values for the selected parameters describing the second check-out operations into the simulation model; transforming the second check out operations parameters into alternative check-out performance results; and outputting the alternative results from the simulation model (HFE: figure 25, Performance Stats—Store Checkout).

Claim 23. The method of claim 1(HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14), wherein the first check-out operations comprise a plurality of resource types, and wherein the results of said outputting step includes performance measures for each type of resource (HFE: figure 25, Performance Stats—Store Checkout).

Claim 24. The method of claim 23(HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14), wherein the first check-out operations comprise a front-end model and wherein the output results include one of: all measures; baggers; cashiers; regular lanes; fast-track lanes; self-service lanes, self service convertible to cashier operated lanes, overall front-end; super-helpers; and express lanes (HFE: figure 25, Performance Stats—Store Checkout).

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Claim 25. The method of claim 23(HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14), wherein the first check-out operations comprise a two lane model and wherein the output results include one of: all measures; customer; cashier; lane; and bagger (HFE: figure 25, Performance Stats—Store Checkout).

Claim 26. The method of claim 23(HFE: figure 10 and Madigan: pg. 1277, section 3.3, 1<sup>st</sup> paragraph, lines 13-14), wherein the performance measures include an average, standard error, a minimum and a maximum value for each performance measurement measure (HFE: figure 25, Performance Stats—Store Checkout).

Claim 27. A method of predicting, with a simulation model programmed to accept parameters within a predetermined range, performance characteristics of a prospective check-out system for use in planning and designing a check-out system comprising (Madigan: pg. 1276-1277, sections 3.1 and 3.2): selecting a check-out configuration; determining parameters within the predetermined range that describe the check out configuration; inputting the parameters describing the checkout configuration into the simulation model; demand; model; determining parameters within the predetermined range that describe customer inputting the parameters describing the customer demand into the simulation transforming the customer demand parameters and the check-out configuration parameters into checkout configuration performance; and outputting information regarding the checkout configuration performance from the simulation model (HFE: figure 20, Model Description).

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Claim 28. The method of claim 27(Madigan: pg. 1276-1277, sections 3.1 and 3.2. HFE: figure 20, Model Description), wherein the check-out configuration comprises a plurality of check stands, and wherein the step of determining parameters describing the checkout configuration comprises the step of: determining for each of the plurality of check stands, at least one parameter that describes the check stand, and wherein the step of inputting the parameters describing the checkout configuration into the simulation model comprises the step of (HFE: figure 7, Input Module) inputting the at least one parameter that describes the check stand for each of the plurality of check stands, and wherein the step of transforming comprises the step of: transforming the customer demand parameters and the check-out configuration parameters into check stand performance for each of the plurality of check stands, and wherein the step of outputting information comprises the step of: outputting information regarding the checkout configuration performance for each of the plurality of check stands, such that a comparison of the relative performance of each of the plurality of check stands is facilitated (HFE: figure 24, Output Module).

Claim 29. The method of claim 28(Madigan: pg. 1276-1277, sections 3.1 and 3.2. HFE: figure 20, Model Description, figures 7, 24), wherein each of the plurality of check stands comprises a check stand of a different type, and wherein the step of outputting information comprises the step of: outputting information regarding the checkout configuration performance for each type of the plurality of check stands, such that a

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comparison of the relative performance of each type of the plurality of check stands is facilitated (HFE: figure 24, Output Module, (block 2430, 2432,2434,2436,2438)).

Claim 30. The method of claim 27(Madigan: pg. 1276-1277, sections 3.1 and 3.2. HFE: figure 20, Model Description, figures 7, 24), wherein the check-out configuration comprises a plurality of labor types (HFE: figure 12, Schedules), and wherein the step of determining parameters describing the checkout configuration comprises the step of: determining for each of the plurality of labor types, at least one parameter that describes the labor type, and wherein the step of inputting the parameters describing the checkout configuration into the simulation model comprises the step of: inputting the at least one parameter that describes the labor type for each of the plurality of labor types, and wherein the step of transforming comprises the step of: transforming the customer demand parameters and the check-out configuration parameters into labor type performance for each of the plurality of labor types, and wherein the step of outputting information comprises the step of: outputting information regarding the checkout configuration performance(HFE: figure 25, Performance Stats—Store Checkout). for each of the plurality of labor types, such that a comparison of the relative performance of each of the plurality of labor types is facilitated.

Claim 31. The method of claim 30(Madigan: pg. 1276-1277, sections 3.1 and 3.2. HFE: figure 20, Model Description, figures 7, 24), wherein the plurality of labor types comprise cashiers, baggers and super-helpers, and wherein the step of outputting information

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comprises the step of: outputting information regarding the checkout configuration performance for cashiers, baggers and super-helpers, such that a comparison of the relative performance of the cashiers, baggers and super-helpers is facilitated (HFE: figure 25, Performance Statistics for Front End Model 1).

Claim 32. A system for predicting performance characteristics of a prospective check-out system for use in planning and designing a check-out system comprising; a computer (Madigan: pg. 1276-1277, sections 3.1 and 3.2. HFE: figure 20, Model Description, figures 4, 7, 24), having a microprocessor; an input device operatively connected to the microprocessor; and a display device properly connected to the microprocessor, wherein the microprocessor is programmed to; receive parameters from the input describing the checkout configuration; receive parameters from the input describing customer demand.

# (11) Response to Argument

First Claim Grouping

Issue: "The Examiner has Improperly Relied Upon the Appellant's Specification

1) Appellant argues using appellant's drawings (Human Factors Engineering (HFE)) (MPEP 2129), as part of a 35 U.S.C 103(a) rejection. Examiner disagrees with appellant's argument of reciting drawings of Human Factors Engineering (HFE) since the drawings appear to be analogous to a Power Point presentation —thus appearing

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as a stand alone document--with no one disclosure of credit to either assignee or appellant.

Based on the latter statement, the examiner argues under MPEP 2129, which states drawings can anticipate claims, regardless of origin. More significantly, the drawing's date of publication (2/24/99) precedes the application filing date (8/31/00) by more than one year, rendering the drawings susceptible to a 35 U.S.C. 102(b) rejection. In addition, the appellant's claim for priority (60/151,269) is improper due to information inconsistencies between the priority document and the application (09/653,196). Therefore, it is proper for the examiner to use HFE as prior art.

Appellant argues that the drawings are not considered prior art and that Madigan doesn't teach all limitations present in claim 1. Since the appellant has administered the drawings into the prosecution, the examiner finds the statement non-persuasive based on the following figures which match some to the details of claim 1: (i.e., figure 8: output statistics (output results); figure 5: Input Module: figure 23 (inputting parameter): Output Module (output results); figure 25 (Performance Statistics for Front-end Model 1 Store Checkout (evaluating alternatives to check out operations using simulation model).

# Issue: Madigan has been Mischaracterized

3) Examiner disagrees with appellant's argument of Madigan's non-teaching of "the use of the model for analyzing alternative scenarios", since the rejection is prefaced in

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Madigan's abstract; which is to "...constantly seeking newer, simpler methods which will help them (business) remain competitive...simulation provides a structured environment in which they (business) can better understand, analyze and improve their process" (Madigan: pg.1275).

#### Issue: The Proposed Modification does not Arrive at the Claimed Invention

Appellant argues that a scenario is non-equivalent to a data dictionary. Examiner argues the various data inputs in figure 1 on page 1276 (Madigan) is inherent; inherent by the logic of the variation of data stored in the computer bank or database, with plurality of choices. This constitutes a scenario within itself since the purpose of a database is to structure or organize information for extraction and manipulation for a series of events or post-solution activity. Examples are reflected in the following (Madigan page 1276, left column bullets 2-5): frequency of scheduled maintenance; the division of repairs into major; medium and minor categories; and the time required to perform the scheduled maintenance.

The appellant states that Madigan fails to disclose the manner in which the input for the scenarios is selected by the user. Once again the examiner points to the abstract as the reasons or motivation, which is to "...constantly seeking newer, simpler methods which will help them (business) remain competitive ... simulation provides a structured environment (HFE: figure 5) in which they (business) can better understand, analyze and improve their process" pg.1275 (Madigan).

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Summarily, coupling HFE's figure 14 with sources of Madigan as previously stated, the examiner deduces prima facie for one to develop a detailed software model (HFE figure 5) with Madigan in order to to "... constantly seeking newer, simpler methods which will help them (business) remain competitive... simulation provides a structured environment (HFE: figure 5) in which they (business) can better understand, analyze and improve their process" (Madigan, pg.1275).

Second Grouping

# Issue: The Proposed Modification does not arrive at the Claimed Invention

5) Examiner disagrees with appellant's statement of claims 3,7,9-15 and 17-26 based on the prior art of Madigan and HFE do not correct deficiencies.

The appellant argues that a scenario is disclosed within the claims as non-equivalent to a data dictionary. Examiner argues the various data inputs in figure 1 on page 1276 of Madigan is inherent; inherent by the logic of the variation of data stored in the computer bank with plurality of choices. This constitutes a scenario within itself since the purpose of a database is to structure or organize information for extraction and manipulation for a series of events or post-solution activity. For example, Madigan states on page 1276, left column bullets 2-5 of the frequency of scheduled maintenance; the division of repairs into major; medium and minor categories; and the time required to perform the scheduled maintenance and repairs by type vehicle and type of repair.

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The appellant states that Madigan fails to disclose the manner in which the input for the scenarios is selected by the user. Once again the examiner points to the abstract as the reasons or motivation to combine: to "... constantly seeking newer, simpler methods which will help them (business) remain competitive... simulation provides a structured environment in which they (business) can better understand, analyze and improve their process" pg.1275 (Madigan).

Summarily, coupling HFE's figure 14 with sources of Madigan as previously stated, the examiner deduces prima facie for one to develop a simulation model (HFE figure 14) with Madigan in order to "... constantly seeking newer, simpler methods which will help them (business) remain competitive... simulation provides a structured environment in which they (business) can better understand, analyze and improve their process" (Madigan, pg.1275).

Third Grouping

# Issue: The Arguments Regarding Claim 1 Apply to Claim 4

6) The appellant argues that the drawings are not considered prior art and that Madigan doesn't teach all limitations cited in claim 1. Since the applicant has administered the drawings into the prosecution, the examiner finds the statement non-persuasive based on the following figures which match some to the details of claim 1: (i.e., figure 8: output statistics (output results); figure 5: Input Module: figure 23 (inputting parameter): Output Module (output results); figure 25 (Performance Statistics for Front-end Model 1

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Store Checkout (evaluating alternatives to check out operations using simulation model).

### Issue: The Examiner has failed to Allege Prima Facie Obviousness

7) Appellant states that Madigan does not teach the "check stand designs, transaction procedures and lane configurations". Examiner disagrees with this statement by establishing a prima facie argument by which Madigan teaches (pg. 1276, section 3.1) the 299 discrete tasks according to their five major task categories for " a variety of front-end checkout scenarios involving cashier checkout, customer checkout or combination cashier/customer checkout" (Madigan: pgs 1276-1277, section 3.1). Together with HFE's figures 14 and 16 (i.e., Number of express lanes; number of regular lanes, etc.), it would have been obvious at the time of invention to one of ordinary skill in the art, to combine the two sources to " seek methods which will help them (businesses) to remain competitive (Madigan: abstract).

Fourth Grouping

#### Issue: The Proposed Modification does not arrive at the claimed invention

8) Appellant argues that the drawings are not considered prior art and Madigan doesn't teach all limitations cited in claim one. Since the applicant has administered the drawings into the prosecution, the examiner finds the statement non-persuasive based on the following figures which match some to the details of claim 1: (i.e., figure 8:

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output statistics (output results); figure 5: Input Module: figure 23 (inputting parameter):

Output Module (output results); figure 25 (Performance Statistics for Front-end Model 1

Store Checkout (evaluating alternatives to check out operations using simulation model).

# Issue: The Examiner has failed to Prove Inherency

9) The examiner disagrees appellant's statement of the examiner not proving inherency of "unlimited arrival mode or a limited arrival mode". Madigan states " the model was configured to simulate 24 hours of store operations per day for a two-day period" (pg. 1277, section 3.3); ... Because customers were force to pass through a single finalization lane, total transaction times were nearly twice as large as those experienced at the regular/express lanes". The latter statements concluded that customer traffic is infrequent and inconsistent, otherwise simulations would be unnecessary. Since the bottom line is to maintain a strong labor force (Madigan: pg. 1277, section 3.3, last sentence) by grasping the unpredictable flow of retail consumer traffic during a normal workday. With figure 10 by HFE, in would have been obvious to combine Madigan with HFE figure 10, as previously stated, to predict the inconstant or unlimited arrival mode of consumer traffic, via simulation, as one possible scenario to maintaining a strong labor force.

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model).

Fifth Claim Grouping

Issue: The Proposed Modification does not arrive at the claimed invention.

10) Appellant argues that the drawings are not considered prior and Madigan doesn't teach all limitations cited in claim one. Since the applicant has administered the drawings into the prosecution, the examiner finds the statement non-persuasive based on the following figures which match some to the details of claim 1: (i.e., figure 8: output statistics (output results); figure 5: Input Module: figure 23 (inputting parameter): Output Module (output results); figure 25 (Performance Statistics for Front-end Model 1 Store Checkout (evaluating alternatives to check out operations using simulation

#### Issue: The Examiner has Mischaracterized Madigan

11) The examiner interprets "super helpers' as nothing more than excess or additional labor to aid with retail transaction. Appellant defines super-helpers as " scheduled in a pool and are available for customer interventions or bagging on a first-come-first-serve basis depending upon the bagging rules specified by the user. The user can schedule the quantity of cashiers, pay station cashiers, baggers…" (specification: pg. 39, lines 4-7). Madigan states the simulation network represents five major tasks (pg. 1276, section 3.1): finalization (tendering cash, check, credit, debit payment; bagging (preparing, filling, and moving bags). The examiner establishes equivalence between appellant's definition of super helpers and what Madigan teaches in section 3.1.

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Furthermore, the examiner declares the term "super helpers" is nothing more than a pretentious term directed towards retail operations.

Sixth Claim Grouping

Issue: The Proposed Modification does not arrive at the claimed Invention

Appellant argues that the drawings are not considered prior art and Madigan doesn't teach all limitations cited in claim one. Since the applicant has administered the drawings into the prosecution, the examiner finds that statement non-persuasive based on the following figures which match some to the details of claim 1: (i.e., figure 8: output statistics (output results); figure 5: Input Module: figure 23 (inputting parameter): Output Module (output results); figure 25 (Performance Statistics for Front-end Model 1 Store Checkout (evaluating alternatives to check out operations using simulation model).

Issue: The Examiner has Mischaracterized Madigan

13) The examiner interprets "super helpers' as nothing more than excess or additional labor to aid with retail transaction. Appellant defines super-helpers as " scheduled in a pool and are available for customer interventions or bag on a first-come-first-serve basis depending upon the bagging rules specified by the user. The user can schedule the quantity of cashiers, pay station cashiers, baggers…" (specification: pg. 39, lines 4-7).

Madigan states the simulation network represents five major tasks (pg. 1276, section 3.1): finalization (tendering cash, check, credit, debit payment; bagging (preparing, filling, and moving bags). The examiner establishes equivalence between appellant's definition of super helpers and what Madigan teaches in section 3.1. Therefore it would have been obvious to merge the two references since the preface of running the model was to acquire and maintain a strong labor force. Subsequently, the examiner declares the term "super helpers" is nothing more than a pretentious term directed towards retail operations.

# Seventh Claim Grouping

# Issue: The Proposed Modification does not arrive at the claimed invention

14) Appellant argues that the drawings are not considered prior and Madigan doesn't teach all limitations cited in claim one. Since the applicant has administered the drawings into the prosecution, the examiner finds that statement non-persuasive based on the following figures which match some to the details of claim 1: (i.e., figure 8: output statistics (output results); figure 5: Input Module: figure 23 (inputting parameter): Output Module (output results); figure 25 (Performance Statistics for Front-end Model 1 Store Checkout (evaluating alternatives to check out operations using simulation model).

### Issue: The Examiner has Mischaracterized Madigan

15) Appellant states "Madigan does not disclose transaction itemization parameters input to a model including scalar values with "a mean and standard deviation event time

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distribution of an event time distribution". Examiner disagrees. Madigan states the following: "Discrete task time distribution data taken from field studies and input parameter based on store report data were **input into the model**.... The average task time for each of these categories was within one standard deviation of the values obtained during field studies, suggesting that the model was operating as expected" (pg. 1277, section 3.2). Based on this information, Madigan appears to teach input parameter to this model with outputs having a standard deviation. Therefore it would have been obvious at the time of invention to combine Madigan with HFE with regard to claim 16, since a modeler would want to manipulate date to specific criteria.

Eighth Claim Grouping

Issue: The Examiner has improperly relied upon the appellant's Disclosure

16) Examiner disagrees with appellant's argument of reciting drawings of Human Factors Engineering (HFE) since the drawings appear to be analogous to a power point presentation or an extraction from a Windows-based program—thus appearing as a stand alone document--with no credit to either assignee or appellants.

Based on the latter statement, the examiner argues under MPEP 2129, which states drawings can anticipate claims, regardless of origin. More significantly, the drawing's date of publication (2/24/99) precedes the application filing date (8/31/00) by more than one year, rendering the drawings useable in a 35 U.S.C. 102(b) rejection. In addition, the appellant's claim of priority (60/151,269) is improper due to information

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inconsistencies between the priority document and the application (09/653,196).

Therefore, it is proper for the examiner to use HFE as prior art.

Issue: The Proposed Modification does not Arrive at the Claimed Invention

17) Examiner disagrees appellant's argument stating that HFE does not necessarily reflect the allegation that such entry is limited to a parameter within a predetermined range. HFE figure 20, forth line clearly states" The front end consists of up to 48 check out stands". Clearly the model states a limitation. The figure doesn't say "an infinite amount or an amount stated by the modeler". For the above reasons, it is believed that the rejections should be sustained.

### (12) Conclusion

In accordance with the reasoning set forth, the examiner contends that the Final Rejection of all claims be sustained. Specifically, claims 1,3-18 and 20-31 under 35 U.S.C. 103(a) and 35 U.S.C. 132.

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Respectfully submitted,

Thomas H. Stevens Examiner Art Unit 2123

February 1, 2005

Conferees

Kevin Teska

Kakali Chaki

KAKALI CHAKI

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Samuel Broda

PAUL W. MARTIN LAW DEPARTMENT, WHQ-5E 1700 S. PATTERSON BLVD. DAYTON, OH 45479-0001.